BEFORE THE

FEDERAL ENERGY REGULATORY COMMISSION

IN THE MATTER OF:	:	Docket Numbers
ELECTRICITY MARKET DESIGN AND STRUCTURE	:	RM01-12-000
(RTO COST BENEFIT ANALYSIS REPORT)	:	RT01-2-000
	:	RT01-10-000
	:	RT01-15-000
	:	ER02-323-000
	:	RT01-34-000
	:	RT01-35-000
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	:	RT01-74-000
	:	RT01-75-000
	:	RT01-77-000
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	:	RT01-88-000
	:	RT01-94-000
	:	RT01-95-000
	:	RT01-98-000
	:	RT01-99-000
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: RT01-101-000
: EC01-146-000
: ER01-3000-000
: RT02-1-000
: EL02-9-000
: EC01-156-000
: ER01-3154-000
: EL01-80-000

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NORTHEAST STATE COMMISSIONERS

REGIONAL TELECONFERENCE

Hearing Room 11H-7
Federal Energy Regulatory
Commission
888 First Street, NE
Washington, D.C.

Friday, March 15, 2002

The above-entitled matter came on for teleconference, pursuant to notice, at 10:00 a.m.

P R O C E E D I N G S

(10:00 a.m.)

MR. MEYERS: Good morning. We are going to get started now. This is Ed Meyers, FERC State Relations, and welcome to the Mid-Atlantic and Northeast States.

We are going to have intros and roll call in just a minute. We know various people are going to be joining the call in a little bit, but these two hours tend to fly by pretty quickly, judging from the last couple calls we have had on this, so we are just going to get started.

The purpose of the call is to answer questions and discuss and receive comments from you on the Cost/Benefit Study released by the FERC.

(Discussion off the record.)

MR. MEYERS: The recorder needed to plug in.

(Pause.)

We are all set to go again. We are just going to be answering questions and discussing the Cost/Benefit Study released by the FERC at its open meeting of February 27th, 2002. We do have the consultants who drafted the report with us here this morning.

The call hopefully will help you as you prepare your comments, which are due April 9th, reply comments due April 23rd, and it should also help us all prepare for future State-Federal-Regional panel meetings which will be

policy-oriented, perhaps more so than this call which is mostly a working session. But those future panel meetings will be fact-based, and many of the facts perhaps will come from this very report that we will be discussing here today.

We are not going to have a presentation. We are just going to have the Q&As and comments.

We are following the FERC Order of November 9th, 2001, today, which means that we gave a notice on this and everything is transcribed and will be put into the record dockets of all the cases.

In that regard, even though many of us know the callers, before each time you speak if you would please kindly just give your name and the state that you are from, that would be great.

Let's introduce ourselves here around the table in Washington, and then we will take a roll call of the states.

MR. DWORKIN: Good morning. It's Michael Dworkin.

MR. MEYERS: Yes. Hi, Mike. We are going to introduce the FERC Staff since they are all here, and then we will go around to the States. That's great.

Tom?

MR. RUSSO: Good morning. My name is Tom Russo. I am assisting Ed in the State-Federal Program.

MS. SIMLER: Jamie Simler, advisor to Commissioner Brownell.

MR. GROMLICH: Rob Gromlich, advisor to Chairman Wood.

MR. MERONEY: Bill Meroney in the Market Development Group in our Office of Markets, Tariffs, and Rates.

MR. TURNURE: Jim Turnure with ICF Consulting. I was the project manager for the RTO Economic Assessment.

MR. WHITMORE: Charlie Whitmore. I do strategic planning at FERC.

MR. LeKANG: Don LeKang. I am with the Office of Markets, Tariffs, and Rates.

MR. GOLDENBERG: Michael Goldenberg. I am with the Office of General Counsel.

MR. MEYERS: Okay, let's go around the States, then, starting with Connecticut, Commissioners first and then staff.

Connecticut?

(No response.)

MR. MEYERS: Delaware, please.

MS. McRAE: Arnetta McRae.

MR. MEYERS: Hi, Arnetta

MS. McRAE: Hey, Ed.

MS. DILLARD: Janice Dillard.

MR. MEYERS: Okay.
MS. DILLARD: Staff.
MR. BERKHART: Bruce Berkhart, staff.
MR. MEYERS: All right, thank you.
And, D.C.?
MR. CARTAGENA: Angel Caragena. Good morning, Ed.
MR. MEYERS: Good morning, Angel.
MR. CARTAGENA: I also have with me here:
MS. MELTON: Sam Melton.
MR. CARTAGENA: And?
MS. HU: Grace Hu.
MR. MEYERS: And, Maine.
MR. WELCH: Tom Welch.
MR. MEYERS: All right, and Maryland, please.
(No response.)
MR. MEYERS: Anybody here from Maryland?
MR. GUNS: Ron Guns, Commissioner. Hey, Ed.
MR. MEYERS: Hi, Ron.
MS. RILEY: Cathy Riley, Commissioner.
MR. MEYERS: Hello, Cathy.
MS. RILEY: Hi, Ed. We've got two more going to join us very shortly, Commissioner Kern and Commissioner McDonald.
MR. MEYERS: That's just great.

Massachusetts?

(No response.)

MR. MEYERS: And, let's see now, do we have--are we doing this one?

MR. RUSSO: Yes.

MR. MEYERS: Do we have New Brunswick?

(No response.)

MR. MEYERS: Nobody from New Brunswick.

And New Hampshire?

(No response.)

MS. PERDINOCK: New Jersey is Michelle Perdinock for Commissioner Connnie Hughes.

MR. BEYER: Mark Beyer, Board staff.

MR. MEYERS: And New York, please?

MS. HELMER: This is Maureen Helmer, and I am joined by:

MR. DIVORSKI: Tom Divorski, staff.

MR. PEDULA: Marco Pedula, staff.

MR. DREXLER: David Drexler, staff.

MR. LIBERTY: Ron Liberty, staff.

MR. TYLER: Howard Tyler, staff.

MR. PENSTON: Bob Penston, staff.

MS. HELMER: And Penny Rubin is joining us shortly.

MR. MEYERS: Great. Good morning, all.

MS. HELMER: Good morning.

MR. MEYERS: Anybody here from Nova Scotia?

(No response.)

MR. MEYERS: We also have on this list Prince Edward Island. I don't know if we got the notices up and out that far.

How about Pennsylvania?

MR. LEVIN: John Levin.

MR. MEYERS: Good morning, John.

MR. LEVIN: Morning.

MR. MEYERS: Rhode Island?

(No response.)

MR. MEYERS: And Vermont.

MR. DWORKIN: This is Michael Dworkin. I'm the Chairman. And good morning, Ed and folks. I will say it now so I don't have to say it later. I am going to need to leave at 11:00.

MR. MEYERS: Okay. Maybe you can get your comments in on the early side.

MR. DWORKIN: I would appreciate that.

MR. MEYERS: That would be great.

And Virginia?

MR. WALKER: Cody Walker, staff.

MR. SPINNER: With him is Howard Spinner, staff.

MR. MEYERS: Okay. And West Virginia?

(No response.)

MR. MEYERS: All right, anybody else in on the call?

MR. DOWNS: Connecticut just joined, Commissioner Jack Goldberg, Chairman Don Downs.

MR. MEYERS: And welcome.

MR. DOWNS: Thank you, sir.

MR. MEYERS: That is a pretty good lineup we've got going here.

MR. NUGENT: Excuse me. Maine has joined you. We just missed our place in line. But anyway, this is Bill Nugent and Steve Diamond is here, and Dennis Bergeron.

MR. MEYERS: Just great. Good morning, and welcome.

MR. NUGENT: Good morning, Ed.

MR. MEYERS: We've got a pretty good team here to discuss the Cost/Benefit Study, so let's just dig in with your questions, comments, or what have you.

MS. McRAE: This is Arnetta McRae. I will start out with I could not tell from looking at the map where the Delmarva Peninsula is with respect to PJM South, or East, or specifically what.

MR. MEYERS: We are on MapQuest now.

MR. TURNURE: Good morning. This is Jim Turnure from ICF Consulting.

I believe--and I can doublecheck this to be absolutely sure--that it is part of PJM South in this breakdown. But let me keep checking that while we are on the call here--

MS. McRAE: Okay.

MR. TURNURE: --and get as clean a look at that as I can.

MS. McRAE: Okay.

MR. DWORKIN: Could I take a minute, Ed? This is Mike Dworkin.

MR. MEYERS: Sure.

MR. DWORKIN: I wanted to start with a comment about commissioner participation, and then to shift to a half a dozen areas of concern.

THE REPORTER: I am having a very hard time hearing him. His line is breaking up.

MR. DWORKIN: The comment about the state commissioner participation is that I think that it is accurately described here, and yet it is important to have people understand more than just these specific details.

There were a half a dozen state commissioners who were asked to give some advice here, and we did in what this refers to as 'a series of conference calls,' but to be precise on them, there was a half an hour original one which was just handing stuff out, a two-hour substantive one, and

a 40-minute one later where we discussed the fact that we wouldn't see the nuts and bolts of this as it went forward.

So the 'series of calls' is one two-hour one with some input. There was two-thirds of a day of nuts and bolts serious conversation about what should be in it in which we expressed several concerns, some of which have been addressed and some of which have not. And then ICF, quite properly I think, went off and did what it thought was right. But I want it to be understood that, although we had a chance to make some comments in the beginning, there is no sense in which this should be perceived as either driven by or endorsed by the State PUC Commissioners who were on the Advisory Panel.

That may be already fully understood, but I want to make sure there is no doubt on it.

Moving to content, I think that this study shows the value of doing this kind of analysis because it reveals a lot of interesting things. But it also shows--

MS. RILEY: We are having difficulty hearing.

MR. MEYERS: That is Cathy Riley.

MS. RILEY: Could you speak up a little?

MR. DWORKIN: It also shows the importance of doing this kind of work early and thoroughly, because this study at least raises almost as many questions as it answers and has a lot of things where you wish it was early in the

process instead of late.

I also have some concern about the scope of the study, which I think are vital to the task that is in front of FERC and are not the responsibility of ICF directly but are the responsibility of FERC.

That is where I want to make my fundamental, most important point: An awful lot of this study is circular. Its purpose, if you will, is to describe the benefits of FERC RTO policy, but it largely starts by assuming those benefits and then quantifying them.

It assumes that trades will occur that are not now occurring if FERC pursues its RTO policies. And then it quantifies the trades that it would be desirable to have occur. But it never in any way makes a link between FERC's RTO policies or specific regulatory rules or proposed regulations and the probability that those trades will occur.

So in essence all the Study does is quantify the size of the pot of gold at the end of the rainbow, but it says nothing in a but-for test, and before-and-after cause-and-effect causal sense about the causal link between FERC's RTO policies and getting to that pot of gold.

So over and over again when you see it says these are the benefits that would result from the goals that the FERC RTO is pursuing, it never says how FERC's RTO policies

will lead to these benefits.

That is a fundamental flaw in the analysis, although it is not a flaw in the nuts and bolts of the study itself. But the study has to be understood as nothing other than a bounding analysis of the hoped-for gains without any real link to what the actual gains would be.

MS. HELMER: This is Maureen--I'm sorry.

MR. DWORKIN: I think, Maureen, maybe I will run through about four or five, of which the first and the others will be faster.

MS. HELMER: Okay. Go ahead.

MR. DWORKIN: The other parts of it that start to be really quite striking are that it focuses on results compared to a base level of production costs, which in essence is generation costs.

It ignores transmission costs in most ways, and it ignores retail delivery. To express the significance of the study, I think it should be, as I've been suggesting for a few months, a system that compares the anticipated benefits as a percentage of the delivered cost of power.

I know that from FERC's perspective it thinks of itself as dealing with wholesale generation and not with retail, but I'm afraid that's like a surgeon who works on your hand saying he's not responsible for whether your heart stops or not.

The fact is that what is being done here has effects on the retail markets as well. And if we are seeing a study that says the outer bound of achievable success is a four percent, five percent reduction in production costs, but it is really only a three percent reduction in the delivered cost of power, it needs to be expressed in the latter way because it has effects on the latter world.

And to just look at the benefits in one small subsector and ignore their proportionate effect on everything else is disappointing.

Moving beyond that, it is not clear to me how transmission upgrade costs are netted out. I have a problem on an issue that came up early which I call the simultaneity of transfer capacity.

In essence, the model assumes that each region can make the simultaneous deliveries of power to all adjacent regions at the same time, but the underlying data that it looks at, which is the transfer capability that disappears not assuming simultaneity but assuming that each regional border is only addressed in and of itself, it would overstate the existing transfer capability, at least the way I understand it.

There is a set of assumptions that reserve margins will drop in the 13 percent range from their higher levels now, and yet almost every economic study that I have

seen suggests that with the degree of anticipated market concentration you probably actually need to see an increase in reserve margins in order to allow economic behavior to avoid having essentially price fixing, or implicit collusion of pricing.

That change alone, the increase in reserve margins instead of the assumed reduction in reserve margins, probably wipes out all the benefits here. And yet it is not even noted.

I was looking through the study and it is difficult for me to find out how it treats environmental considerations. One can argue that if it has reduced productions that there is an environmental loading benefit. On the other hand, it looks as if it is basically the same level of generation occurring just being transferred to the lower cost areas. Except in low-sulfur coal areas, it looks like there is actually likely to be a significant increase in emissions.

And there are some pretty obvious NEPA considerations that FERC at least is going to have to address in this context that I do not see addressed in the study, and that I would think should be. I admit that there is plenty in the study that I still have not found yet.

There is a consideration, in my mind at least, of what I will call the Ohms Law effect. We all know that if

you increase the amount of transfer over the existing wires, you get an exponential increase in the amount of line losses. And I do not see an account for that.

We are talking about something where the total benefits are in such a small percentage range, it seems like an Ohms Law effect is likely to be the increased line losses that have to go a long way towards ending the perceived benefit here.

There is one final assumption that I have trouble with, and it emerges throughout. It is that it assumes that the production cost of generation, which will go from the $90 billion a year range in 2004 to the $150 billion a year range in 2020, that is a $60 billion increase in 16 years and is also a 66 percent increase in 16 years.

That is a rate of increase above nominal inflation, which is higher than education, it's higher than health care, it's really kind of astounding. It is never examined, really. It is just assumed at the start, and I have to say that it is a difficult assumption for me to accept, although I have no specific reason for showing that it is wrong, but it need serious support.

Finally, though I do think that even when you go through all of this you get some lessons that are useful here, first that the size of RTOs seem to be essentially trivial, whether you have two, or five, or nine of them, and

you can say that it's got a couple hundred million dollars attached, but when you are talking about hundreds of billions of dollars per year for several years, the differentials there are not only lost in the noise they are meaningless. The size of RTOs doesn't seem to count at all in this area.

And finally, the pretty obvious lesson is that demand response is by far the most significant factor, much more significant than seams' issues or size issues, or even opening up trade that might not have occurred otherwise, which supports I think the fundamental idea that if wholesale markets are going to work at all, what is needed to make them healthy is a meaningful demand response as opposed to tinkering with the transmission capacity issues or other things that make life easier for producers but that do not generate a meaningful value to the people who buy out of the market.

So although I have got a lot of concerns about the Study, the fundamental notion that good market rules that create a market where demand response matters are more important than all the stuff that people actually seem to be spending their time on is a lesson that does seem to leap out of it. And I was disturbed that that lesson exists on page 2, and page 72 of the big report, but does not highlight it at all in the summary study presentations which

focus much more on some secondary issues.

So there is a runthrough, and I will be quiet for awhile and see what other folks have to say.

MR. TURNURE: This is Jim Turnure at ICF. Should I, Commission folks, should I respond to some of these points?

MR. MEYERS: Let's ask Maureen, since she had a comment following up on Mike's, Maureen, whether you want to talk now or have Jim go ahead.

MS. HELMER: Well if you don't mind--

MR. MEYERS: This is Maureen Helmer, Chair of New York.

MS. HELMER: I would like to second some of the things that Michael said. As always, he really expressed some very important points very eloquently.

The first issue where I was jumping in, and it also relates to Michael's last point with respect to demand response, and the issue of which benefits were placed in which scenarios, and particularly with respect to the demand response issue, I don't see anything intrinsically different about a large RTO which encourages good demand response programs as opposed to either smaller RTOs or ISOs, or frankly the impact that say retail policies have on the development of a demand response market.

I mean we have got very strong demand response

programs now here in New York State. I expect those to continue. I do not expect them necessarily to take quantum leaps when we enter into a large organization, although certainly there is some room for growth there.

So where those benefits are pocketed in the three or four scenarios that have been set up through the study I think is very important in terms of comparing those scenarios.

Secondly, the point that Michael made with respect to transfer capability is also something that my staff has been concerned about. Something that a study like this loses vis-a-vis for example a MAP study which looks at how the system actually works and where electricity can actually flow to I think is something that isn't obvious from the study that that has clearly been analyzed.

For example, one of the issues that we have questions about is why so much of the power seems to flow to the South. Why cheap Midwest power would flow to the South as opposed to up into the Northeast is not clear from the study.

We also share Michael's concern about reserve margins. There does not seem to be anything addressed in this study as to why a larger RTO helps us to maintain lower reserve margins but at the same time maintain the same level of reliability.

I do not think FERC or anyone else has ever suggested that in the transition to larger markets or different markets, that anyone would stomach a reduced level of reliability. If anything, in the current markets that we're developing, nonenergy markets but economic markets that we're developing in terms of computers and the sensitivity to computers, if anything there is a demand for a higher level of reliability not a lower level of reliability.

Finally, with respect--well, two final points. One is a question. That is: What--and this really is a question for ICF--is what are the levels of new generation that are being assumed in this, and was any sensitivity analysis done in terms of the benefits that are produced by these various models? How sensitive are those results based on how much new generation is brought on board.

And finally, with respect to the issue of the smaller RTO assumptions, what seams' issues are assumed to be either remaining or incapable of being improved by not going to an RTO. In other words, which can be resolved without an RTO versus which are assumed to be unresolvable without a larger region RTO?

And with that I will either hand it back to ICF, or to other commissioners based on your call list.

MR. MEYERS: There is a lot on the table already,

so let's go to ICF now.

MR. TURNURE: Well, hi. This is Jim Turnure at ICF. I think there are a couple of issues that were common between Chairman Dworkin and Chairperson Helmer, and I would like to combine a couple of them right up front.

I think the first of those would be the reserve margin justification and the assumptions that were used in this analysis regarding reserve margins.

Reserve margins are an important driver of the product cost benefits mainly because of the need for capital additions to meet reserve margin requirements.

When you have lower reserve margin requirements, it can be the case that you may defer or even not have to build some new units, which saves on capital costs and so forth.

There are two major drivers or assumptions that go into the lowered reserve margin approach that has been used here. One of them is the ability of regions to share capacity more effectively as the Commission has discussed. And most of the benefit discussion we are keying off of is actually from the NOPR for Order 2000, which has a much larger benefits' discussion than the final rule does, just as a point of information.

So there is more effective capacity in reserve sharing.

And secondly, as the regions themselves become larger, the impact of single contingency failures become smaller.

Now those are very broad-brush approaches. And it is important to point out that this is not an engineering reliability type study. It is quite accurate to say that this is not GE MAPs. This is not Power World. This is not a transmission flow analysis, because of its national and long-run scope.

So there are some further issues that people may very well wish to address in their particular area.

MR. DWORKIN: This is a quantitative question. If you assume the 15 or 16 conservative reserve margin, instead of a 12 to 13, wouldn't all your benefits disappear?

MR. TURNURE: There are a lot of other important drivers besides this. I think you have characterized the demand response as a very important driver, in fact a dominant one.

We don't know because we have not done the pure sensitivities of each assumption. My sense would be from using this type of model a lot that you would get a significant diminishing of some of the production cost benefits if the reserve margin assumptions were left static. But I can't say exactly how much.

The operational efficiencies of generators are also a very important driver, the heat rate and availability assumptions.

Now let me just wrap up on demand response at least for this preliminary comment by mentioning your point about market concentration. And I just have to say that we say in the study that we are not analyzing some kinds of what we view as really short-term market phenomena. And market power is one of those sort of short-run phenomena that we are not analyzing here because we are studying the longer term supply/demand balance in equilibrium.

So when you talk about market concentration, the threat of market power, and the potential for what some people are calling economic reserve margins as a hedge against that kind of market power, that also is a very interesting discussion and one that is really not taken into account in this particular study.

So I just want to be very clear about that.

The other major area that came up that is common between the two sets of initial comments was the transmission transfer capability and how the simultaneity of those transfer capabilities was handled.

We are beginning from a starting point of NERC Reliability Assessments to the extent that those NERC sources cover all the relevant links in the model.

That is the basic starting point. Whenever we can source to NERC, we do that. Those analyses, if you dig into them and look at NERC's subregional assessments and other people's competing reliability assessments, have a fair range of transfer capabilities.

These are extremely sensitive-to-system conditions. You always have a range of numbers available to look at when you are assessing transfer capability, and we try to stick as close as we can to the major NERC Reliability Assessments.

Now those are typically designed to be simultaneous transfer limits under sort of average, normal operating conditions subject to normally first contingency losses. So there is sort of the first incremental transfer limit.

Now we also have in the model, and I think this may be something that slips by in the report, we do not allow those transfer limits to be maxed out when lines are being used simultaneously. We actually have a very particular constraint that actually de-rates the line flows if the lines are being operated simultaneously.

So if there is only one link being used in a region, it can operate to its limit, its NERC limit, but if the links are being used simultaneously, there is actually a de-rating that occurs in the model to handle exactly this

issue.

It is relatively simplistic compared to very detailed flow modeling, but it does at least attempt to address that issue.

MR. DWORKIN: Does it include Canadian and Mexican border issues?

MR. TURNURE: This study handles the Canadian Provinces in a static manner.

MR. DWORKIN: I was focusing specifically on the transfer capability. For example, if New England is taking peak load from Quebec, which is more than 10 percent of our base on many occasions--

MR. TURNURE: Right, we're--

MR. DWORKIN: --that limits the amount that we can send south to New York. And I do not know whether you took into account the Canadian constraints in looking at the constraints of the cross-border-to-next regions.

MR. TURNURE: That would be worth following up on in the sense that we would need to check how the source studies for those limits were modeled. You have to hope that they were modeling Canadian effects in some kind of an average or responsible fashion.

MR. DWORKIN: Well I think it is vital because certainly for New England, and I believe for New York, the north-south transfers to Canada are larger than the east-

west or southern one to the rest of the U.S.

And so to just assume that they are okay is leaving out the big variable while taking the small one.

MR. TURNURE: No, I understand that. That makes perfect sense as a follow-up. It is again a question of whether the reliability assessments have handled that question.

We are taking those transfer capability assumptions pretty directly from NERC.

MR. DWORKIN: Okay.

MR. MERONEY: One of the things--this is Bill Meroney by the way--one of the things to keep in mind here is in the way this model was set up at this point. As Jim said, the Canadian--Canada was not modeled as a region within the model. It was modeled static, if I'm right, Mr. Chairman. So any attempt to address the simultaneity issue probably has to be incorporated in the way the specific outside exogenous variables were treated.

And so it is a little bit different than the way it would have occurred in a larger--if the model were run in a little bit larger context.

MR. DWORKIN: I guess I am going to say one thing and then be quiet for a minute, but in general the issue that we care about is not what can the model do and what did the model do. The issue is what is the analysis that has

been done to support FERC's policies.

And knowing that the model can't do it does not get away from the need to do it.

MR. MERONEY: Well I think this is definitely worth a follow-up from Jim, and I guess the point I was making was that at least in terms of understanding the framework of the model, this is one among a number of options that people might want to consider--maybe more problematic than I am portraying--but that Canada in some versions of this model is included as a region, and so it can be. But it wasn't in this study. So that is something to keep in mind.

MR. TURNURE: This is Jim Turnure again. Let me also make a broader point that what we have attempted to do in this study is be fairly clear about what is in and what is out. It is not to say that things that are not handled in this study are not important; rather, it is simply a question of us using systems that can accomplish the basic task of doing very long-run dynamic national-scale analysis which just by its nature can't take into account some of the particularly shorter term and more geographically detailed questions.

And trying to be very clear about where this piece leaves off, which may suggest other things that need to be done, but we are just attempting to be as clear as we

can within this study. And so any of these questions that require clarification, that is exactly the kind of thing this call is designed to do.

MR. TYLER: This is Howard Tyler from New York.

Let me just second what Commissioner Dworkin said about the flows from Canada to New England. If that is not properly modeled, it absolutely cannot properly show the transfer capabilities between New York and New England.

Also, similarly, you cannot possibly study the flows between PJM in New York without representing a through path through Canada, through Ontario, because of the circular flows around Lake Erie. You cannot have a static model and hope to accurately portray the benefits of a New York-PJM-New England model.

MR. TURNURE: This is Jim again. I would have no problem with people saying that more accurate power flow modeling is an important adjunct.

The simple fact is that we are not yet able from a technical standpoint to fully mate and incorporate true power flow modeling with longer run optimization and dynamics.

I mean even GE MAPS technically isn't a pure power flow model. It attempts to do some of the things that longer run models do, and some of the things that power flow models do, but that is just a marriage or incorporation that

is a little ways off.

So eventually to understand everything you have to use multiple types of systems, I think.

Can I handle a couple of the more detailed points really quickly that Michael Dworkin raised? Just to mention a couple of them, you asked about the production costs in the model and the way in which they increase.

That has a lot to do with the model's treatment of existing sunk capital. Because the model only incorporates costs that are relevant for operational short-run decisions and longer run investment decision, existing capital, generation capital in this instance, is not directly represented in the model.

That is explained in the report to some degree around page 48, 47-48, and there is a little table, 2.9, that shows how because the model does not consider past capital, but it is including going-forward capital for new builds and so forth, the capital cost component that is directly in the model does in fact go up very fast because it starts at zero and over 20 years it grows to encompass all the capital that was built in the meantime.

So that is why when Michael Dworkin deserves that increase in production costs overall, it is because the model by the end of the forecast period does include a large portion of all the capital in the system. But it starts off

in the first year only with the capital that needs to get in place that year.

So that is a sort of a technical point, but I just wanted to explain it.

MR. TYLER: I think I understand why you get the big number at the end and a rapid rate of increase--

MR. TURNURE: Yes.

MR. TYLER: What I do not understand is whether that undercuts the value of using your base case production cost number as the denominator when you are trying to figure out the percentage value of undertaking this project.

MR. TURNURE: Yes, it gets--

MR. TYLER: In other words, if that number is artificially inflated--or I'm sorry if it's artificially small because you excluded all past production costs, then you aren't getting a 5.6 percent benefit overall, or a 3.8 percent benefit overall in production. You are getting a much, much smaller benefit because you are not using the right base and it overstates the value of the RTO project.

MR. TURNURE: Well this came up in the Commission hearing, in the FERC hearing on the 27th when people asked about final consumer impacts.

There are a lot of ways you can analyze those numbers, and it has been--I think the Department of Energy's Comprehensive Electricity Competition Act analysis of a few

years ago was one example at a national level of people taking these kinds of analyses--a rather similar model was used--and trying to push those benefit calculations all the way through to encompass not only the generation component but all the other components of cost that end up in delivered household energy bills.

That is an assumption-fraught exercise. There are a lot of ways you could do that, but I am just pointing out one place where it has been done.

MR. TYLER: Well in this case it is a very easy one. You add up all the retail payments under a FERC Form One Reports nationwide, and you divide that into your assumed benefits for an RTO policy, and you get a percent. It is not a very sophisticated analysis, but it is a very valuable one that seems to be missing.

MR. TURNURE: I only said in the meeting that there's a lot more work that could be done on that. I think I sort of pointed to Commission staff at that point.

MR. MERONEY: This is Bill Meroney, Mike. I mean I think your point is well taken.

The question is what the appropriate number to use is in the denominator. And certainly at the national level it is a very simple exercise. It probably cuts any percentages that you are talking about down by a fair amount.

MR. TYLER: You probably wind up with a 1.5 percent to 2 percent gain, instead of a 3.8 percent gain over 20 years.

MR. MERONEY: That's a pretty easy calculation. I mean--and I think it is easy for folks to do, and that is part of the reason--I am assuming that is part of the reason why ICF wanted to be fairly clear about what costs were in and what costs were out, since at least at the national level it is fairly easy to do.

When you start doing it regionally, then I think you may run into some complications about the relationship between the wholesale production costs or what are presented in this report as firm prices and the relationship between those prices and what the ultimate consumer sees in each region.

And so I think maybe--I don't know. I can't speak for Jim, but that might have been one of the things he was talking about when he was talking about it being an assumption-fraught analysis.

MR. TURNURE: Well normally when people ask questions like that you can't just give them a national answer because what they normally want to know is things like the household impact. Right?

So you have to start going and looking at the statistical abstract of the United States and finding out

how many households there are. Then you have to wonder about commercial, industrial, and residential consumer classes; who gets what portion of the benefits. That kind of thing is where it ends up being--

MS. RILEY: Well, excuse me. This is Cathy Riley. I think there is somewhere in the middle. I think most of us who represent states are more interested in the state analysis and the regional analysis, because that is what this was supposed to do, as opposed to a national or a household.

So I think the question has something more to do with breaking this down so that we get a clearer indication of the regional and/or state numbers.

Is somebody saying that was not possible? Or just was not worth the effort? Or too much time involved? Or what was the reason?

MR. TURNURE: That is a different question. Again this is Jim Turnure at ICF. That question has come up a number of times because we have essentially reported system-level production costs here, but regional firm energy prices.

The Commission staff can comment here if they want, and I could explain what comes out of the model, per se, because there is a large volume of things that come out and a lot of that is not so much difficult to report; it is

just a question of procedurally where does it stand.

MR. MERONEY: This is Bill Meroney again. I think there is no question that this was an exercise that was under significant time and resource constraints and was to some extent a first-effort to move beyond some of the previous studies that had focused at the national level and start, frankly, from the top down to start to get a picture of overall wholesale markets, their interactions, and how this played out at the regional level.

It is certainly reasonable to assume that a lot more work could be done, and that a good bit of that would concentrate in making sense of these regional results at a much more detailed level.

MS. RILEY: Well I think--this is Cathy Riley again--I think the overall issue for most states, and I will just speak for Maryland, we are concerned and have been since the beginning that a proposal is out there that on average for the country was terrific. Everybody said that.

We asked for some numbers to show what did it mean to us. And we didn't say that means we are going to be for it or against it. We just thought it useful to know what the overall numbers were before we all jumped into it.

So the fact that it means something to a region is one thing. But on average within a region it means something else. And I know that one of the concerns that

was expressed by at least our representative in the study was some need for something a little bit more finite, at least some subset.

And it seems to me the gentleman who asked the previous question was really referring to that as well, that we get into something that is more than a national look. And I do not mean to be critical, because on the whole I think this study supports the concept that we were arguing all along. And that is, that four RTOs were not the issue; that there were other issues that were more important to deal with.

So frankly I am feeling very good about this study, but I do think it could tell us a lot more. And that is kind of our overarching view of this.

We, for example, have not figured out yet what you have included. According to your maps, we are not sure who PJM is. We don't know what VEIP is. So we have questions not unlike folks asking Canadian questions. We have questions on even who is in this study.

MR. MERONEY: This--

MS. RILEY: Did you really model the Northeast RTO that FERC was showing? Or have you modeled a whole different animal that we are not familiar with?

MR. MERONEY: I think--

MS. RILEY: We know some pieces, but we don't

know all. So those are the kinds of questions we have, and they are far more than just, you know, just national averages.

MR. MERONEY: I agree with you personally, very much so. I think that we have had in some of the previous teleconferences many requests for a lot more information than what is in this report because there really is a lot of detail that comes out of this model at the regional levels within the model that don't get down to the smallest detail but get down a good bit more regionally.

And that is something we are considering right now in terms of releasing information on the more detailed outputs of the model, and a document on a lot more of the assumptions to at least facilitate--

MS. RILEY: That would be very valuable.

MR. MERONEY: Yes.

MR. MEYERS: Okay. This is Ed Meyers. We did get this in the other calls, and a lot of the Commissioners are not going to take a position unless they know how this impacts their region and in some cases their states.

So the filings are coming up April 9th. We have learned from the other calls, and from this one as well, that it is very likely that those kind of statements could very well be made if you choose to make them.

And so then what we will do is take into

consideration all the requests, and the Commission itself will then figure out what to do with them, how much they will fund, if any, and what is left for the states.

For example, some of the states, we are learning, are on their own using this data to develop state-specific cost/benefit data. In other cases they are asking the FERC to develop for them regional data specifying the region of their concern, like Cathy mentioned what--it is not real clear whether PJM is even singled out here, or what the boundaries are, and the like.

So that is the kind of thing that will help us going forward in figuring out the next level, if there is to be one, of data.

MS. RILEY: And we really appreciate that. But if somebody today could tell us why half the State of Virginia appears to be in PJM, we would really appreciate that. Because we don't even know where to begin to comment. If you could give us an answer to that one, it might narrow us down a little bit.

(Pause.)

MR. DWORKIN: Ed, could I ask a procedural question? This is Michael Dworkin, and it is just this. I know that you are having calls like this with each of the regions, and I know they are being transcribed for all of them.

Is there going to be a ready access to the transcripts of all the regional calls so we could look at them as we prepare our comments in a timely way?

MR. MEYERS: It is a ten-day process. They are kept by the--Tom, explain it.

MR. RUSSO: This is Tom Russo. You will have access to each and every one of the transcripts from--

MR. DWORKIN: In time to make our comments, or not?

MR. RUSSO: Yes, in time to make your comments. Because, for example, the transcripts of this call will be available for free and on our website ten days from now.

You can buy them now, certainly. They are pretty pricey. But you will still have the opportunity before the deadline to really look at all of the transcripts, and we will just get them up online as soon as they get by that ten-day hold period that we have.

MR. DWORKIN: Okay. Thank you. That, I want to say, is to my mind of real high importance because it is putting into context the national concerns with the regional concerns matters a lot.

MS. RILEY: Absolutely.

MR. TURNURE: And on PJM versus VEEP--this is Jim Turnure again--I will follow up with you on that because I would prefer to go back and dig down deeper with the

transmission folks at ICF and make sure I give you an answer that is completely accurate. But I can do that in a very timely way.

MS. McRAE: Well could you do something more broad than that, though--this is McRae--in clarifying what is in PJM East, West, and South?

MS. RILEY: Amen.

MS. McRAE: That would be very helpful.

MR. TURNURE: Well, you know, if you are looking at the report, the map that has the most--that is easiest to see is on page 32 where it is just the regions themselves. There you can see that tiny little gap in PJM East that leads down into the Delmarva. I think I said it was PJM south before, but it is east.

MR. MERONEY: This is Bill Meroney. I think the only way really to address your question is to have Jim provide something more specific on that particular issue.

MR. TURNURE: Oh, yes.

MR. MERONEY: It is barely visible in the map.

MR. TURNURE: Exactly.

MR. MERONEY: So I mean I think--I assume he can do that in a timely way, too.

MR. TURNURE: It is easy to do. It is just hard when I am locked in a room on a conference call.

MR. MEYERS: Once he does it--this is Ed

Meyers--that will be posted for the record for everybody as well.

MR. TURNURE: I can just provide a much more detailed breakdown of how these regions actually are configured, and which NERC region is which, and how they translate.

These start from NERC regions and sub-regions, with further breakdowns based on significant transmission bottlenecks. That is the general approach. But I think everybody would be interested in seeing more detailed stuff, especially for the Northeast where the regions are relatively physically small.

MS. McRAE: Um-hmm. Could we also go back to Michael Dworkin's comment about the treatment of the environmental issues, and the related costs? I did see in the report--this is McRae--that the coal production would increase, and that has been a big discussion about the attendant environmental consequences of that.

Is that quantified anywhere?

MR. TURNURE: This is jim Turner. Well let me make--I think there are two sides to that. Point one was:

How was it handled in the analysis, per se?

This particular modeling system was originally developed for the Environmental Protection Agency. It is the follow-on system to the one they used for the acid rain

program discussions, and it is the system they used for the ozone transport region, ozone transport assessment group, NOx, SIPCAL, and associated regulatory proceedings.

It is that same system from the ozone transport debate, if you will. It is also the system being used for multi-pollutant analysis and so on and so forth today.

Bearing that in mind, it has very detailed representation both of environmental constraints or regulations and of the options that people have in terms of compliance.

So there are NOx limits, SO2 limits, existing, current regulations are represented in the model going forward. And power plants and operators have options between a wide variety of retrofit technologies--certain kinds of fuel switching, changing the dispatch order in the mix in general, and trading on the allowance market.

There is actually allowance banking and trading in there. So it is a very robust system as far as that goes. Now that is one side of the question.

The other side is where is that in the results and in the outputs. And there is a lot more detail that comes out of these model runs. There are entire sets of emissions allowance prices, that whole set of issues is heavily represented in modeled output.

So it is another informational issue for people

to consider, I think.

MR. DWORKIN: This is Mike Dworkin. I guess I would like to put it in the bluntest phrase. If what it turns out that the model predicts that if everything happens as anticipated and all the anticipated and assumed goals of the RTO are achieved, you get a 1.5 percent reduction in the cost of delivered power. But that one of the necessary paths to getting there is a 30 percent increase in FOx and NOx emissions?

That is an important part of the cost/benefit study for FERC, and it is an important part of the cost/benefit comments from us. And yet, we do not have the other half of that part available.

Whatever the model can produce, it hasn't produced it in the report.

MR. TURNURE: Well, Michael--I'm sorry, Chairman Dworkin, this is jim Turnure again.

The one thing that happened between the Environmental Impact Statement for Order 888 and the environmental assessment for Order 2000 was the issuance of NOx regulations by the EPA.

The situation as it is today in terms of final regulations is that both SO2 and NOx are subject to emissions limitations. Now those are in the model.

There will be variations over time and in

geography where the emissions occur. However, regulatory caps cannot be violated in the model because there are constraints.

MR. DWORKIN: Jim, I think you are missing my points. I am assuming that your model assumes that production will be legal as opposed to illegal, and therefore the constraints will be met?

MR. TURNURE: Right.

MR. DWORKIN: But below the constraints there is a broad range from zero to the constraint. And within that range, there are different production scenarios for U.S. generation that produce more higher and lower loadings.

And my guess is that your (person sneezing) here depend upon higher loadings than your basecase, but I can't tell that. To the degree that they do depend on higher loading environmental emissions as a base case, then that is a cost.

MR. MERONEY: This--

MR. DWORKIN: And it needs to be assessed as part of a cost/benefit analysis.

MR. MERONEY: This is Bill Meroney. I think that is a perfectly reasonable request, and I do not know without asking Jim here whether or not a lot of the information that you are interested in would just be available if not summarized in the normal model outputs from here. That is I

guess my first point.

My second point is that I think it is a very reasonable concern, but in many respects what we see here is a sort of pattern of greater efficiencies and better use of the transmission system that would have been represented in the environmental analysis for Order 2000.

So just in terms of expectation, I would expect some impact, but it might be fairly limited. I agree completely that the best thing to do is get it out there and look at it.

MR. TURNURE: There's lots of information available on it.

There are just one or two other quick points I would make in response to the original set of issues. And then I am sure there are lots more issues. This is Jim Turnure, still.

One was about demand response and how important that is vis-a-vis other topics, and why that was in Chairman Dworkin's view not highlighted sufficiently at least in the summary.

Just looking at the model outputs, it is really the generation efficiencies that are dominant even relative to demand response.

And so when we just looked at the results from a very technical standpoint, it looked to us like, yes, demand

response is important but these market improvements and generator efficiency improvements are clearly the front and center driver of results.

Even though demand response is important in a way that I think some people viewed as surprising, it did not surprise me in the slightest because I had been analyzing that for a long time.

But when people see that dramatic increase from the generator case to the demand response case, it does indeed catch your eye. But it is still a 50 percent improvement over what the generator efficiency case had. So it is not the single most important element; it is an important element.

I just wanted to make that comment.

MR. TYLER: Jim, this is Howard Tyler from New York. On those two points about efficiency and availability, first of all what is the availability improvement that you assumed for this case? And was that uniform?

And secondly, on the efficiency why would the efficiency improvement apply to areas that already have existing ISOs? Isn't the assumption based that where there are competitive markets, that the efficiencies would improve?

MR. TURNURE: Yes. This is Jim. Point one on

availability, that is a one-time increase in plant availability within each plant type. And that is a uniform assumption throughout the regions.

On your second point, treatment of existing ISOs, essentially we took a very consistent uniform approach to this. We were intent on isolating the relative importance of each of these aspects. And in that regard, we actually considered the tradeoff between trying to get very, if you will, delicate with regard to existing ISOs, and how long have they been operating, and have they had time to get that kind of improvement or not?

Specifically with the case of ERCOT which just really got underway recently, you have to really start to worry about those things. And it creates a rather nuanced look at what was really a very broad assumption in this case.

So it is a legitimate issue, I think, and that was the approach that we adopted and the rationale for it. So again, that's a uniform assumption as well.

MR. TYLER: I'm sorry? On the first answer you said there is a uniform improvement in availability. Is there a range, or any numbers you can throw out as to what the availability improvement was?

MR. TURNURE: It is a 2.5 percent increase in availability, which is really just a question of outage

management, essentially. And that is applied to plant types. So each type of plant within the model gets that on its own original base, fossil units only I should add.

MR. DWORKIN: This is Mike Dworkin with a factual question. Did you explicitly compare your assumption about improved availability with historical record which shows decreased availability in New England and in California in the periods following the markets, particularly in times of high demand?

MR. TURNURE: No. That was not--that type of statistical analysis. In this report, we did some additional work on the demand response side, in particular. That particular assumption was sourced really to prior work where they had done more statistical work.

So, no, we did not do fresh historical comparisons for this study.

MR. DWORKIN: My sense is this falls under your general exclusion of market abuse and errors in market rules, but certainly what we have seen in practice is that whenever the demand goes up in New England, and did in California, more units went out for assumed availability than usually had, and that the transition to a market-based structure did not lead to an increased availability; it led to a decrease.

So it was apparently an effort to force economic

scarcity.

MR. TURNURE: Well there is a lot of historical statistical comparative institutional analysis that people do do. I mean there are many ripe areas to do that. I am just telling you what this particular study took into account for this purpose. Again, a very legitimate area.

There are one or two other quick things that people brought up. One was new generation assumptions. The model has both--we both carry a list of plants that are going to get built soon, firmly planned builds, and people might be interested in that.

And then the model, after the initial few years the model is building what it economically sees as the optimal mix of builds. And so those are both things that I am presuming you mean when you ask for that. I thought that was Chair Helmer. Another informational request.

MR. DWORKIN: This is Mike Dworkin. I am going to leave. Thank you for letting me go early and compliments on a lot of the stuff that I do like in it, even though I have been being critical. Take care.

MR. TURNURE: Take care.

MR. MEYERS: Thank you.

MR. TURNURE: We have one more thing about smaller RTOs and seams' resolution that was brought up initially. I want to say--and maybe Commission staff can

echo or let me know what they think about this, but we were not--we were handling seams' issues in a pretty uniform way for this particular study.

There are costs of power transfer between RTOs as opposed to within RTOs. You could call that a seams' issue. But those are handled on a strictly uniform basis in the study. It is a single charge between RTOs as opposed to within them, and so we are not making assumptions about particular seams in terms of which of these specific ones can be resolved or not resolved. It is just not the level of detail that is going into this piece.

(Pause.)

MR. RUSSO: This is Tom Russo. Are there additional questions?

MS. RILEY: This is Cathy Riley. I would like to come back to transmission costs, please.

MR. MEYERS: Go ahead.

MS. RILEY: Maybe it is just me, and it is Friday, and it has been a long day, but I got lost in your transmission answer before. So I apologize if I misunderstand here.

We were trying to get an understanding, particularly on our Delmarva Peninsula, what transmission constraints were modeled, and what ones were modeled as being resolved. And then how those costs were plugged in,

the cost for the resolutions.

Can you tell us in PJM what constraints you modeled? And then which ones you resolved? And where those costs were plugged in?

MR. TURNURE: Well--this is Jim Turnure at ICF--I am trying to get the terminology in your question straight so that I know how to answer it.

When you say "resolved," what is the reference there? Do you mean physically somehow upgraded? Or do you mean something about the economics or the charges across them?

MS. RILEY: Well in this whole thing you talk about hurdles.

MR. TURNURE: Right.

MS. RILEY: Are your hurdles not transmission constraints?

MR. TURNURE: They're economic. They're charges, basically.

MS. RILEY: Okay. All right.

MR. TURNURE: In these models, there is usually a physical and an economic side to any piece of it.

MS. RILEY: Did your study ever in our region resolve physically any transmission constraints?

MR. TURNURE: No. Physically there's a one-time within-path upgrade that occurs. It's a 5 percent increase

in transfer limits. That is something that happens on all the transmission links. It is designed to represent better congestion management, more accurate ATC, and that sort of benefit that the Commission discussed. And that is a physical change to the linked capacities. But it is the only change.

MS. RILEY: But you did not include any costs associated with that 5 percent increase?

MR. TURNURE: That's correct.

MS. RILEY: So this study, although it looked at constraints, it addressed them in only an economic resolution fashion as opposed to any physical resolution?

MR. TURNURE: That's right. The model actually can be dynamic in the transmission side, as well as the generation side.

In other words, you could allow the model to economically construct transmission. That is not something that people are comfortable with as a general rule because of the difficulties in siting and all that.

The model would, if allowed, build quite a lot of transmission.

MS. RILEY: And so in your 2006, I think it was, when in some parts of PJM the costs went up, why did they go up?

MR. TURNURE: Because of the, the, the dynamic

there has to do with the shifts in power flows more broadly in the East.

Essentially what's happening is portions of the Midwest have started to use the Southeast as their export market rather than PJM in the Northeast.

PJM, and particularly PJM South, are actually sort of becoming the export platform to the further Northeast, if that makes any sense. PJM South in particular starts to build more capacity, both to meet its own needs and because for some siting reasons and gas delivery reasons it is the place to build new generating capacity even to serve points further north.

So there is a lot of activity and capital costs going on in PJM, and particularly PJM South.

MS. RILEY: And so because that is happening in PJM South, PJM East is penalized?

MR. TURNURE: Well it is a very delicate thing because as a region has to either rely more on its own resources or export resources to somewhere else, that depends entirely on their internal mix of generation and their supply curve.

So it is that kind of effect that you need to disentangle region by region, and that is where I think people's request for further information are going to come in.

MS. RILEY: Well for states who are nicely located around natural gas pipelines and are trying to add generation with some swiftness, to look at something that suggests, or to hear your comments that our own addition of generation plants at the expense of our own rivers and whatever actually has negative implications for some parts of our state is not a real strong, enthusiastic endorsement of our building new generation, is it?

And you are saying that is what this study shows?

MR. TURNURE: To be honest, I am hesitant to get to that level of specific state and regional comment, only because it takes very hard looks at the results to get a clear picture of exactly why things are happening in that particular area.

MS. RILEY: Well but I thought that is what you said. And, you know, we are sitting here with potentially four, three CPC requests in, and potentially another one, to use the Potomac River--in effect, D.C.'s drinking water--and if that kind of comment is what your study points us to, it is not real encouraging for us to try and deal with some of these water issues.

Maybe I misunderstood what you said. Okay.

MR. TURNURE: Well I am just raising those as issues and potential explanations. I am simply trying to not be definitive about something which just requires a

little bit harder look.

MS. RILEY: Well I guess my concern is that when you do a cost/benefit analysis, it is tough to do. And you draw lines. And people have earlier pointed out that some of the lines that were drawn have to do with the externalities of the environment, and coal, and other things, which I would clearly understand.

But for some of us, one of the great externalities is water. And apparently that would not be included. And I would understand that. But if you model based on the growth in generation in this area, which is imminently linked to water, then you begin to wonder, you know, what else should have been put in. And I know you had to draw the line somewhere.

MR. TURNURE: Well a big theme is the linkages between markets, so that is a valid point, too.

MS. HELMER: This is Maureen. Can I just follow up on a point that Cathy kind of started with and what I think is a disturbing--Maureen Helmer, I'm sorry--a disturbing response, which is that there is no assumption about transmission expansion. And I think by definition no assumptions about joint or regional transmission planning.

You know, one of the benefits that I think anyone would look to from a large organization is joint transmission planning. And to not have that as an input

simply because it is difficult seems very circular.

Yes, it is difficult, and the states have been blamed in kind of the national political rhetoric for not getting transmission built. And if we are going to look at these large organizations, and at least not know what the ec economic benefits of that could be, I think we have really lost sight of what are these benefits.

I mean we look at this study and it says that there are essentially no benefits for New York from moving from the current system of three ISOs to a larger Northeast RTO. And then we are told that there is an assumption that we are living with the current constraints of the transmission system but for perhaps some improvements that might be made because of better allocation of resources across those systems.

And that is a real concern. And I would strongly urge the FERC to look at and to do the runs which you folks seem to say can be done with this model.

Second of all, you know, as I listen to the phone call it seems more and more clear that there is a lot of perhaps valuable information and raw data that came out of these studies that is available in this report. And I know you said earlier that some consideration would be given to having that more generally available, and I would strongly urge that that information be made more generally available.

MR. WHITMORE: This is Charlie Whitmore at FERC. I wanted to follow up on an earlier point about potential price increases in PJM in 2006.

I don't know the answer, so I am going to pose it as a question to Jim Turnure. My understanding is that the model ends up sending a lot of power from the Midwest that now goes to the Northeast, and it starts sending it Southeast instead.

And I think the net effect of that is that you basically back off a bunch of stuff that is now available to the Northeast. And so new stuff gets built in PJM. But notwithstanding that, the price can still go up a bit because you are not building as much as fast as is backing off to go to the Southeast.

And I guess my question to you, Jim, is something that Commissioner Dworkin asked at the beginning. Number one, is that right? And number two, if that is true, why is it that so much power starts going Midwest to Southeast instead of Midwest to Northeast?

MR. TURNURE: Well, yes, this is Jim Turnure. That is--in the report that is all described around the series of transmission flow maps. Those are a feature of the model which we use to diagnose runs and try to understand runs.

And even though those can be a little bit

confusing for folks, we felt that it was important to make an attempt at least to put those graphics in there and give people something to work with.

Essentially, the way it works is there are some parts of the country today which, if given the chance, would import a lot more power than they are currently importing. And the major regions where that occurs in the runs are California and Florida.

So essentially California and Florida both are allowed to, through the hurdle rate adjustments, bring in more electricity than they have been in the base case. As a result, power flows throughout the country are rerouted. And that is a big feature of the study.

It implies that it is difficult to do this sort of analysis without considering a very broad scope. It is difficult to analyze the Northeast in isolation because the effects of the Southeast and Florida are effecting the Northeast. So you need to start with something that is national before you drill down, if you will, to more detailed regional assessments.

Is that a sufficient answer for that part of it?

MS. MURPHY: If I could interrupt, this is Carol Murphy from New Jersey.

Does that then assume that the Northeast will not construct more generation to satisfy their need and send

more Southwest? And does that assume that the California Coast, for instance, will not develop more generation to send to the Midwest or anywhere else?

MR. TURNURE: Essentially what is going on is the regions that wish to import more, the Florida and California in this case, they are able to either not use current inefficient generation, or avoid building generation that happens to be more expensive there.

Over time, what happens is that the new generation tends to locate where it is cheapest to build, either because of the fuel infrastructure or because of some other set of regional changes in construction costs.

So generally speaking, the model is attempting to locate new generation closer to in this case natural gas supply regions. I.e., the interior Rockies and parts of-- parts of the Southeast are really where the builds are occurring as opposed to far off at the ends of pipelines. So that is part of the dynamic.

MS. MURPHY: And I can understand that from an economic perspective, but from a siting perspective a state like for instance Kentucky where development of a generator might be less expensive certainly, the resistance may be more expensive.

MR. TURNURE: That's correct. And in fact the Governor of Kentucky has a moratorium on new plant siting

applications as we speak, to do more studies of exactly this issue.

MS. MURPHY: And the issues that those states have expressed, anyway, seems to be one that developing the generation simply means it is going to cost them more internally because their generation becomes more valuable, therefore their prices go up.

Is there an economic balance being played in this in other to make sure that a state that does generate receives the residual benefits?

MR. TURNURE: Yes, because the simple production costs in energy price outputs from the model are actually not the end of the study. And we start to discuss that towards the end of the report.

Essentially what you are thinking about is, well, what about the export revenues? You build a plant for service to another region. Money is coming back. Someone is paying you. And what happens within the state when the generator gets more revenue becomes a very state-specific issue and very hard for this study to address in detail, but we are trying to suggest that that is where people's thinking goes once you end up in the situation of building plants to service the export market.

MS. MURPHY: The parochial issue does not go away.

MR. TURNURE: Indeed. And there's job creation, and state tax issues, and all those sorts of things.

MR. MERONEY: This is Bill Meroney. This is more of a kind of a process point about follow-up here. From the recent discussion it seems that there are two kinds of things that it would be useful to sort of focus comments on.

One is information from the current scenarios that were run because, with particular reference to the transmission system there could be some valuable information in there in terms of how the RTO scenarios are affecting the transmission system.

And the other is alternative scenarios that would make sense to people, because I think we have heard a lot of good suggestions here and elsewhere. And whoever does it, it is going to be essential to get comments out specifically directed to those kinds of things so they can kind of be weighed and figure out where that ought to head.

Sort of looking back when we did an environmental impact analysis of Order 888, those kinds of things came up. We did run some scenarios, or scenarios were run that looked at the impact of expanding the transmission system with a sort of earlier model similar to this one.

That is certainly the kind of thing that could be done here, in principle. So tell us what kinds of things

would be most beneficial to you.

MR. WHITMORE: This is Charlie Whitmore. One other point along those lines. Both the Chairman and I believe a couple of the other Commissioners took note of the fact that the study does show some price increases in some areas for varying lengths of time, and I think they all expressed the thought that this was an important issues, was one of the reasons for doing the study, and that it was obviously something that we, the Commission, would have to think about going forward in each of the states as well.

So I think one of the things this study has done is to put some notion of which regions those are on the table for the inevitable discussions that have to happen going forward from here.

MS. MURPHY: Okay.

MR. WALKER: This is Cody Walker in Virginia. I just had a question I guess about the process for follow-up. Are you asking for our input as to additional scenarios that we would like to see here in this call, or in a separate communication?

MR. MEYERS: I think both. These calls have served the purpose of getting various requests from states, and in all the regions that we've talked to so far, and so we will be gathering those and analyzing those. And after this call has ended, you all are going to be thinking about

the kind of filings you are going to be making on April 9th.

So those filings may, at your own choosing, include various requests of pulling out information from current scenarios, and also suggesting additional scenarios.

One thing I was wondering about, just to clear up this point, Chairman Helmer said that we are missing something pretty big if we are not including assumptions about transmission expansion, that we would be losing significant benefit.

And earlier, Jim Turnure, you mentioned that that is kind of difficult because you have to make rather specific assumptions about siting.

I am wondering, is it feasible, since this is a question that is current before us here, to make some general assumptions about siting sufficient to get the transmission expansion question quantified somewhat.

MR. TURNURE: Well--this is Jim--I think the first thing to know is that even if you are not allowing the model to build transmission, any constraint in the model is associated with a shadow value.

In other words, the value of relieving that particular constraint, whether it is an environmental constraint, a reserve margin constraint, or a transmission constraint. Each of those, the model automatically calculates if it were to be relieved by some small

increment, what would it be worth.

So you actually have a set of shadow values for the transmission links that exists in the model even when the transmission grid is left static. And that is information, and that is something people could look at.

Beyond that, it is often the case that for clients ICF will exercise the system to look for, for example, the value of a merchant transmission line. If someone were to build something, where would they want to locate it?

It is the type of thing people do, you know, fairly frequently. It is a system that is well suited for that because of its long run dynamics.

Beyond that, I mean the question of regional planning is highlighted in this type of study simply because of the effects that are really long-range between these different regions.

There's a lot people need to take into account. And I don't know if I am empowered to comment on that kind of policy or not, but there is something about planning and something about regions and something about states cooperating that simply has to come out of this whole set of issues.

That is my opinion.

MR. MEYERS: Then would you need the states to

suggest, for example, various types of expansion. If you ran a line through here or there, you know, what kind of effect would it be? Or are there some general kind of assumptions that you could make without having such input?

MR. TURNURE: Well that could work either way. People could request specific links or routes or something, but also you could for example pick the most valuable links to relieve in certain regions, and take that as a more uniform consistent approach.

We would have to think a little more about that, because it brings up some of the regional aggregation questions. A big question is at what point do people actually take the model down a level of detail in terms of regional focus, because that can be done as well.

And a lot of these specific transmission line questions are probably better addressed when you depart from the national scope of the model and reconfigure it to just look at the Eastern Interconnect, or the Western Interconnect for instance. Then you actually get a much better level of resolution.

So there are some issues tangled up in that.

MR. MEYERS: But you could make some least-cost assumptions.

MR. TURNURE: Yes, you could, some consistent assumptions.

MS. MURPHY: This is Carol Murphy again. Can you make cost/benefits for the states that assume some of these responsibilities, or take some role in these? Can there not be some cost/benefit from tariffs?

MR. TURNURE: You mean in terms of incentives?

MS. MURPHY: In terms of incentives, and in terms of benefit. In terms of the price of energy to residential customers. The kinds of things where you've done cost avoidance by developing something regionally or being involved in a regional thing. If it happens, your state should receive some benefit, should they not?

MR. TURNURE: I guess my comment as an analyst would be that once you are doing that and your focus is state by state, again taking this model at a national level is a little too big.

MS. MURPHY: No, I'm not thinking nationally. Excuse me. I am thinking on a regional basis.

MR. TURNURE: Yes. Exactly.

MS. MURPHY: In other words, if one state is far more aggressive in getting the transmission sited and helping that process along, then the benefits should accrue in financial as well as in ease of transmission to that state.

MR. TURNURE: Well technically, yes. It is quite a--the kind of analysis you can do, and this kind of

approach is well suited for.

Practically speaking the question of whether that kind of analysis can sit at the federal level with a national model to me is a tricky issue because at some point you are going to want to break down and get into a more regional type of focus.

So it kind of raises the issue of where is the forum, really, for that type of analysis.

MS. MURPHY: Okay. Thank you.

MS. HELMER: Jim, this is Maureen Helmer again. What you referred to as the shadow information, is that something I can locate in this report? Or is that some of the more detailed data that is not available to us at this time?

MR. TURNURE: That is a very, very detailed piece of model output. Each of these model runs, let me just let you know, is like a 12 megabite data file which would format into several thousand pages of actual text.

We never print them, usually, at ICF. We look at them on screens with text editors, and search functions, and then we pull that information and format it depending on what we are trying to do.

So that particular bunch of information would be something that we would search out of a run file and format and deliver to someone, if requested.

MS. HELMER: From a process perspective, FERC folk, is that the kind of thing that we should specifically ask for? Because to get back to my original point, it is real counterintuitive here in New York that the New York numbers came out where they are. Is that the kind of thing we should request, either immediately or as part of our comments?

MR. MEYERS: What you request is what you request.

MS. HELMER: Okay.

MR. MEYERS: I think the process here is that we are going to just consider all the requests and see how they shape up. We have cost considerations, too, as to what we can do and what we can't do.

If we get 12 requests, that is one thing. If we get 100, that is another thing. And, you know, kind of organize ourselves, too, after all these calls and after all these filings to see what approach is needed next.

But, you know, if you choose to go ahead and do that, that is your call.

MR. MERONEY: Yes. This is Bill Meroney. That is a little bit of what I was trying to get at with the question of there are some things such as what we were just discussing with respect to shadow value that is valuable information, that is in current runs, that sort of by its

nature would be less costly to provide.

And it would help, just from a process standpoint, to get a sense of what sorts of things like that people are looking for.

MS. RILEY: I want to thank Marie for going back to the transmission thing. This is Cathy Riley again. To a certain extent it seems as though leaving off the transmission resolutions is like analyzing improvements to cars and forgetting to put highways in and maintaining highways.

So it just seems to me a very significant piece is left out. So I personally would appreciate anything that would give us some guidance relative to these shadow values. So thank you for that, Maureen.

I just had one question. I am not clear on the sensitivity of your model. So if I could just ask this: You indicated that on the availability issue, for example, you took a one-time 2.5 percent charge? Is that right? A reduction in cost, or value? Let me say value.

MR. TURNURE: It is an increase in the physical availability in terms of 86 percent, 89 percent. That type of number.

MS. RILEY: Which is a value and is perceived as a benefit in your model. Is that correct?

MR. TURNURE: Yes, that's right.

MS. RILEY: If in fact in the Northeast region the number has already been used up, we have already arrived at it, for example--I'm not saying we have or haven't, just for example--the change of your 2.5 to say a 1 percent, how sensitive is the model? What would that 1.5 percent alteration mean? Can you give us some sense? Is that a minute effect that would be difficult to trace through your model? Or is it of some substance?

MR. TURNURE: Well, I think that just as an informed speculation, it would be not all that significant compared to the other assumptions in here.

However, that is a pure sensitivity analysis question and there is not a lot of room in a 90-day study to do that much pure sensitivity analysis. In fact, the only assumption really that is completely isolated here is the demand response assumption, which has its own scenario, where it is the only change. So that is a pure sensitivity case right there.

MS. RILEY: Okay.

MR. TURNURE: The other ones are all tangled up in sets of assumptions because it is scenario analysis.

MS. RILEY: Okay.

MR. TURNURE: Which is not the same as sensitivity analysis. So I wouldn't say it would be a huge effect, but I would be guessing.

MS. RILEY: Okay. Thanks.

MR. WALKER: This is Cody Walker in Virginia. I guess this touches on a question that Chairman Riley raised earlier about the placement of Virginia, but in looking at the map it appears that Allegheny Power, which is part of PJM West, has been included in the Midwest.

I guess I am a little confused just in general about the treatment of certain companies, the Alliance companies in particular, as to how you chose to place them and in which RTO. Would you talk about that a little bit?

MR. TURNURE: I think that the Commission--this is Jim Turner again--I think the Commission staff could make a comment about that, and I could as well. It is an interesting process trying to decide those things for the purposes of an analysis like this.

Do you want to say anything about that, Bill?

MR. MERONEY: Well, to say the least, that was a moving target during this analysis. Things were changing a bit, and I guess I would say that the first thing to do is to get real explicit on exactly what ended up in and what ended up out.

It was changing enough that I would be hesitant to say exactly which ended up where. The last point, if Allegheny is not in PJM, that would seem like a serious oversight. But we need to check.

MS. RILEY: Well you started this study 90 days ago, and 90 days ago Allegheny wasn't in PJM. They just moved into PJM in the last couple of weeks, officially. But I can understand whether it's in or out. But the other question that Mr. Walker asked had to do with Virginia.

No one has talked, until the last six weeks, about this move to Virginia. And wasn't this study started like 90 days ago or so? And wasn't it all premised on trying to figure out the RTO configuration? And wasn't it all about did the Northeast RTO as proposed by FERC not by us make sense?

Are you saying that in fact you did not model the RTO as proposed by FERC in October, but you now have a sort of sliding kind of thing that Virginia is included to a greater extent? I asked that question an hour ago.

MR. MERONEY: I am saying that is something we need to take an awfully close look at for the very reasons you are laying out here.

When we started out, I believe that that was the starting point. Clearly right now it looks as if from the ICF report that we've got at least parts of Virginia in the Northeast. So that is definitely something we need to survey.

MS. RILEY: Well we are trying to be partners in this. And we all have other things to do besides look at

maps that we can't see, and comment on them, and spend hours and hours this week and last trying to understand, to give you our input and to be fair.

And an honest, innocent question has been asked several times and we can't now even find out what the parameters are.

How can we even acknowledge and respond to this?

MR. TURNURE: Well let me just address that. This is Jim Turnure. I will tell you from the guts of this process and the guts of the study, we asked a lot of people where to put this piece of Virginia, and we did not get a good clear answer from anybody. And we asked a lot of people, to be honest.

MS. RILEY: Did you ask PJM?

MR. TURNURE: This is the sort of thing where again the sensitivity would be probably called for. The fact is you could run this piece of Virginia in the Midwest or the Southeast or the Northeast. It is a pivotal area, just like TVA is. And we did this as a judgment call.

And if people have a problem with that, I would suggest that they try to find out what difference it makes.

MR. WALKER: This is Cody Walker. I guess you just hit on something that we have been contemplating asking you to do, is to do different analysis to try to get a better assessment for where Virginia Power, and perhaps some

of the other Alliance Companies, would best fit.

Would they best fit in the Southeast, the Midwest, or the Northeast.

MR. TURNURE: There are some very interesting sort of frontier effects between the Northeast and the Southeast that actually would vary a fair amount if these regions were in one or the other of those RTOs.

So it would be interesting to look at.

MR. MERONEY: This is Bill Meroney again. Let me--Charlie Whitmore wants to jump in, too. I think we have hit on a really key sensitive and important issue here about exactly where a couple of these entities go.

And it seems to me like a very good candidate, and I think this model is just the right vehicle at this point to run some scenarios where they are in a number of different places. And I think that would be perhaps a high priority recommendation.

MS. RILEY: Well we are supposed to be making a filing by April the 9th commenting on this. And at this moment, you are all being very nice and kind and willing to run a variety of different runs.

We have in front of us a run that you have heard Chairman of Vermont, Chairman of New York, Chairman of Delaware, and others ask questions assuming this model. And how can we respond if we don't even know whether Virginia is

in or out?

It would be helpful to get an answer to that question. Is this run including half the state of Virginia, because it would in fact potentially skew the New York data, the New England data, and all the PJM data?

I have no idea to what extent. Can you just tell us? Is that map accurate? Is half the state of Virginia in this region?

MR. TURNURE: Yes. I'm sorry. I didn't think that was that unclear. Yes, it is.

MS. RILEY: Well we thought it was a mistake. We thought your map had to be a mistake because clearly you were running a model that we had all talked about, the Northeast RTO. So the answer is, no, you didn't run the proposed Northeast RTO. Is that correct?

MR. TURNURE: Proposed by whom? I'm sorry.

MS. RILEY: Proposed by FERC.

MR. TURNURE: None of these RTOs were designed to be the ones proposed by FERC.

MS. RILEY: That's the first time that has ever been said, and it is not in your document. And it is a waste of my time and my staff's time to have spent this amount of time to analyze to such a degree this report.

MR. MERONEY: Excuse me. This is Bill Meroney. I just want to have one question. That is, I am really

sorry if this conversation was misleading you about where the region was.

I thought everybody was having trouble sorting out the maps. And if, if you've been sort of working hard on this analyzing it thinking the maps are wrong, I am even more sorry.

This is the kind of thing we could certainly clarify exactly what's in, because it looks like part of the state of Virginia, and not. And I don't think that is clear from the map.

MR. TURNURE: Well the table above the map says "NEPOOL PJM New York and VEEP".

MR. WHITMORE: This is Charlie Whitmore. I am sorry that whatever misunderstandings here are causing such a problem. What I would like to suggest is a couple of things.

Number one, that we get you the very strong specifics on exactly what goes where, which is in each subregion and so forth within the next couple of work days.

And the other is that we get you an explanation as to exactly why Virginia is where it is. I came into this process a bit late myself, and I don't know the answer to that or I would give it to you as best I could. But we will come up with that explanation and get it to you.

I would like to suggest that there has been no

effort on our side to bait and switch. The people here have been doing the best they can. And if it ends up being confusing or not what people expected, then I think everybody involved is sorry about that and we will try to do our best to fix up what we can and go from here.

MR. WALKER: This is Cody Walker in Virginia again. I can certainly understand the confusion about where Virginia goes. We're confused, as well.

One of the things we were hoping for was an insight as to where the best placement of Virginia would be. And I guess I would strongly urge, to the extent that you are considering additional scenarios, that you do something along the lines of trying to assess the Alliance Companies that currently do not have a home and to try to figure out where the best place for those folks to go would be. Just as a general matter.

MR. WHITMORE: Thank you. I think that is a very good comment, which everybody on--this is Charlie Whitmore again--everybody on the FERC end of this conversation has heard and is taking to heart.

MS. DILLARD: This is Janice Dillard from Delaware. Could I just ask for one more piece of information?

If you're going to tell us whether the Delaware--where the Delmarva Peninsula is in PJM South, if you end up

saying that it is in PJM South, can you tell us why on the map on page 60 it shows an interconnection of some sort between the Delmarva Peninsula and Virginia Power? Because there is no such interconnection.

MR. TURNURE: Oh, I have to say that I earlier, when I initially answered that, I actually misspoke and then corrected it a little bit later.

MS. DILLARD: Right. You said it was PJM East.

MR. TURNURE: Right.

MS. DILLARD: Afterwards.

MR. TURNURE: That's correct. And there is no interconnection between the Delmarva and Virginia, per se.

MS. DILLARD: Okay, then what--

MR. TURNURE: That's PJM South, which is a rather small area, actually.

MS. DILLARD: Okay--

MR. MERONEY: This is Bill Meroney.

MR. TURNURE: Sorry. She wasn't finished.

MR. MERONEY: It's all right.

MS. DILLARD: Does PJM South, does it represent the Baltimore-Washington area?

MR. TURNURE: Yes, essentially.

MS. DILLARD: Is there no link between PJM East and PJM South? There are no change in transfer? Again, the map on page 60.

MR. TURNURE: Well the way that map is configured, it's linked through PJM West. I would have to look at the corner of Pennsylvania down around Philadelphia to make a more clear statement about that, and I am happy to do that.

MS. DILLARD: Okay. Thanks.

MR. MERONEY: This is Bill Meroney. I do think that this particular issue, along with the Virginia issue, is something that we should be able to respond very quickly on and get it out there to tell you exactly where these regions are, and where Virginia was in these scenarios.

MS. McRAE: Well I recall--this is McRae again--my request was, because PJM is so critical that we be clear on what is in each one. That's East, West, and South.

MR. TURNURE: This is Jim again. You know, I really like maps. There was a time when I was a geography major and we forced analysts to do a lot of mapping that had never been done before even to this level, and it makes me feel sort of sad that if we had just done more of it for the Northeast and done some zoom ups and so forth, probably a lot of this discussion wouldn't be necessary in the way that it's been going.

Of course we can provide more of that type of detail, and it would be not difficult to do, really.

MR. TYLER: Jim, this is Howard Tyler from New

York. While you are doing that, it looks like you omitted a transmission connection between New York City and PJM East. Of course there are numerous lines that exist between New York City and New Jersey. They are not shown on this, and hopefully your model actually represents it and you just omitted it from the map, but we would like you to confirm what you modeled.

MR. TURNURE: You're saying between New York City proper and New Jersey?

MR. TYLER: Yes. Exactly.

MR. TURNURE: Okay. I'll take a look at that. I'm not sure if we just modeled that through downstate New York as a convenience, or if we have omitted a link on the map. So I would like to make sure what the right answer is there.

MR. TYLER: Well either way, that is a problem. If you modeled it through downstate New York, then it doesn't properly represent the flows. And what you call downstate New York is really the Hudson Valley. It has nothing to do with New York City or Long Island. Electrically it has nothing to do with it.

So you have to show--your model has to represent a transmission link between New York City and Eastern PJM.

MR. TURNURE: Well I would just like to make sure if it is an error, one way or the other, which way it is.

MR. TYLER: We would, too.

MR. TURNURE: Great.

MS. HU: Jim, this is Grace Hu from D.C. I have a clarification question to ask you.

For the base case assumption, are you saying on page 31 of the report you say "no RTOs," and on page 51 you indicate its current status quo. But the status quo is different from no RTOs.

Can you clarify that?

MR. TURNURE: I think that is sort of a naming, or a nomenclature issue. Essentially--maybe this is more of a procedural question. Maybe the Commission staff should assess it.

I think when we distinguished between RTOs and existing, operating independent system operators, that is pretty much what we were getting at there. When we said no RTOs, we meant no policy FERC RTOs. That doesn't mean there aren't existing ISOs. We just aren't calling them that. And that kind of terminology does get a little confusing.

(Pause.)

MR. MEYERS: Anything else on this?

MR. WALKER: This is Cody Walker again. Just a quick question on how did you deal with planned transmission expansion? Did you reflect those? Or are those sort of just buried in your overall expansion function?

MR. TURNURE: I would have to check to see if there is anything significant that is not included going forward. It is my recollection that the current set of transfers is essentially left as is. So there would have to be some--

(Scratching and jostling background noise.)

MR. TURNURE: --what's all that rustling?

MR. WALKER: Someone is jostling papers around and I am having trouble hearing you.

MR. TURNURE: Yes. I am waiting for that to go down, too.

It was my recollection that the physical limits between regions are basically left as is. Within this level of aggregation, it would be interesting to see if there are big enough planned links, and you would have to wonder about a thing like the Neptune Project, for instance, in the Northeast.

At what point would you consider that to be something that you would add into the model or not? Generally speaking, though, there aren't, I don't think, major transmission links added to the model for this exercise.

MR. WALKER: Well I was thinking specifically about AEP's proposed 765 kV line.

MR. TURNURE: The Cloverdale line?

MR. WALKER: Yes.

MR. TURNURE: Right.

MR. WALKER: And which has been approved by the Virginia Commission but other approvals are still outstanding. So I was just wondering how it may have been dealt with.

MR. TURNURE: You know, I read in the NERC Reliability Assessments that they keep sort of pointing to that as a sore point, almost. And I'm not sure at what point they are going to be able to actually construct that facility. But that is one of a number of sort of fairly significant links which people would like to be putting in place, but that is exactly the reason why it gets so specific and so difficult to simply, if you assume those lines do come into play, a lot of people have a problem with that, too.

MR. WHITMORE: So the answer is?

MR. TURNURE: The answer is, we didn't assess that as part of this study, I don't believe, and I would like to make sure.

MR. MERONEY: This is Bill Meroney. Jim will check the specifics, but whatever would have been done in terms of putting those lines in would be the same in both the base case and the scenarios. So it might not have that much impact.

MR. TURNURE: I concur with that.

(The sounds of a phone being dialed are heard.)

MR. MEYERS: Are we still on?

(Voices answer yes.)

MS. McRAE: What is the turnaround on the various points that were raised. This is McRae.

MR. WHITMORE: This is Charlie Whitmore. We will have a wrapup at the end of the meeting so that we all agree, and maybe this would be a good time to start it, as to what it is that we are trying to do.

I would say, I think the one, the one promise that I think we have already I hope pretty clearly made is that we will get you the specifics on exactly where all the maps are and who goes where, and the reason for Virginia being where it is, and we will do that within the Monday-Tuesday time frame of next week.

Is that fair, Jim?

MR. TURNURE: Well, yes. After the last call today, there should be a fair pile of immediate follow-up items which we will parse out to staff at ICF and attempt to get very fast turnaround on.

MR. MERONEY: I would like to be as specific as we could on three things at least that would be there.

One is, exactly what is in the Virginia portion of PJM in the maps, and confirm that was indeed the way PJM

was treated.

Another is the specifics on where the Delmarva Peninsula is in PJM. I think generally Jim would say it is in the East, but let's be as clear as we can about that.

And then the third one specific I heard that should be able to be dealt with in this same time frame was connections between New York City proper and PJM East.

Those are the specifics that I heard for sort of immediate disposition.

MR. WALKER: This is Cody Walker. Could I add one more? That is, whether or not Allegheny Power is in the Midwest or in PJM?

MR. TURNURE: Yes. This is Jim. I would view it as a worthy thing to just take the entire set of Northeastern model regions in particular and try to really peel those apart and make it all in one comprehensive, short summary so that people can have all that information.

MR. MEYERS: Was there anything else on our list, Charlie, Jim?

MR. TURNURE: There are a lot of requests that I think fall under the category that you described earlier, Ed, of things which are relevant and important but are going to have to be considered as a set when everyone's got their information requests in.

They included transmission shadow values.

They included environmental results and considerations.

They included the more detailed regional outputs from the model, the sort of production cost outputs.

And I thought I heard some requests for certain kinds of sensitivity runs. I am not sure if that needs to be clarified, perhaps. And any attempt to particularly isolate where the various Alliance Companies might or might not fit into these different regions. That was a pretty clear request.

MR. WHITMORE: That is what I have in my notes. This is Charlie Whitmore. But I think we should go around all the people on the conference call and see if there is anything else that you think we either have or should commit to doing quite quickly in terms of a response.

MR. RUSSO: This is Tom Russo. I heard perhaps it was the first Commissioner from Vermont, or perhaps somebody from New York talking about the role of Canadian power to the Northeast and the ability to get power to New York State.

I am not sure if that is something we have to deal with right now, or whether we are going to see specific comments requesting that type of an analysis. So some help, some feedback would be appreciated right now from New York State or other Commissioners.

(No response.)

MR. MEYERS: Did we get all of the requests so far down? You know, obviously as Jim pointed out there are various scenario requests which may be made, you know, putting Virginia for example in PJM Midwest, and Southeast might be a request that might come out of this, and various types of transmission expansion models. That's all to be analyzed.

MS. McRAE: Just one further thing that I would just like to be absolutely clear on, Ed. This is Arnetta. Whatever came out of the national modeling does not represent the regional discussions. I just want to make sure I am clear. Doesn't represent what was originally proposed in the RTOs from the regional perspective?

MR. MEYERS: What about that, Jim?

MR. TURNURE: I would be interested in people's perceptions of that, because from a process standpoint as we did this there had been a lot of discussion about, well, what about four RTOs, or four RTOs plus Texas, and so forth. But when it came down to: Well, what exactly are we talking about here? Essentially certain aspects of that were left up to our judgment. And again we attempted to--we read the trade press, we looked at a lot of press releases, we had to make some judgment calls--

MS. McRAE: To create the most current scenario,

really?

MR. TURNURE: Yes. Exactly.

MS. McRAE: Um-hmm.

MR. TURNURE: And the question of where is Entergy, and where is SPP. Are they together? Are they in the Midwest? Are they in the Southeast? That was a difficult area.

And this Virginia question was probably the most difficult of all of those. And we did not have a definitive--we weren't under a set of definitive guidelines as far as that went. And essentially we went, I think our transmission people in the end decided which way the interconnections made the most sense. And that's what happened with Virginia.

MR. WHITMORE: This is Charlie Whitmore. We have somebody in the room who was involved in some of the proposals early on, and I think he may have the best perspective on how this evolved. So, Don LeKang.

MR. LeKANG: This is Don LeKang. My comment is that the Commission never drew lines stating RTO boundaries. There were a lot of press reports suggesting boundaries, but the Commission never drew any lines.

It did call for the regional meetings for the various parties to discuss, but it left those meetings open for participants to be included or to select various

meetings to go to.

So I can understand where the confusion is on where the lines might be drawn for the study.

MS. McRAE: Okay.

MR. MEYERS: Well I am glad you brought that up, Arnetta, because, you know, obviously there wasn't a static judgment made as of July 12th, or anything like that. So there was an evolutionary process.

The ICF did the best they could working with the FERC. And when you make your filings on April 9th, you may at your own choosing wish to get other boundaries or scenarios requested for the FERC to run.

MR. CARMINE: And I think the point is we need to know exactly what it is--

MR. MEYERS: Who is speaking, please?

MR. CARMINE: --what RTO it studied.

THE REPORTER: Who is speaking, please?

MR. CARMINE: Gregory Carmine from Maryland.

MR. MEYERS: Okay, go ahead, Greg.

MR. CARMINE: And we need to know exactly what RTO regions you modeled before we can comment.

MR. MEYERS: Yes. We have committed to giving you that within two business days.

MR. MERONEY: Bill Meroney again. Just to be clear, what I heard was we committed to giving you exactly

what was in the Northeast. Was that the extent of it, Jim, since it's ICF that is kind of doing this?

MR. TURNURE: I think so. I mean, I mean the model's subregions that are in each RTO were listed in those tables above the maps. And then it is just a question of how much optical or physical resolution is better. And I think more is definitely better.

And then there is the question of which links there were, and any narrative about, you know, the process, or the justification for the approach. So that information should not be difficult to provide to you.

MS. HELMER: This is Maureen Helmer from New York again. From a process perspective, you will be, I assume, providing all the folks on this call with the information about the Northeast, and any other questions you're getting back to us on it next week, but I'm wondering about in terms of some of the other regions. You know, we have listened--

(Interference on the telephone line.)

MS. HELMER: --and, for example, Florida raises a very good question about whether they could even take in all the power you folks assumed was being shipped down there. That has implications for the results up in the Northeast.

Are you going to be sharing information that you are providing to the Commissioners from other regions to us, as well?

MR. TURNURE: Good question.

MR. MEYERS: They will all be in the docket. In fact, all of the items we said we'd get back to everybody on will be placed in the docket for all to see.

One other point of clarification is that once we decide, once we take all this information in, all the many requests we get, however many there are, dozens of them perhaps, we're going to have to make our judgments of what we're going to go forward with.

Some of the states and regions are already saying that they may wish to recognize that we are not going to do everything, or maybe we can't do everything. And so they may choose to pay for, or somehow develop studies on their own so that the whole thing is covered from a policy and data perspective.

MR. WHITMORE: This is Charlie Whitmore from FERC. I would just like to ask a question of the FERC people around the table on process, because I am not quite sure on this.

When we promised to get back to you within a couple of business days and we're going to try to do some--we didn't promise a time frame for Florida--but I would expect it wouldn't be too different from that, procedurally it all goes into the docket.

Does that happen immediately?

MR. GOLDENBERG: All the dockets.

MR. WHITMORE: Does that happen immediately? Or how should we handle that?

MR. GOLDENBERG: This is Michael Goldenberg from General Counsel's Office. I think what you should do is have the report issued. When it is issued through the Secretary, it will get on RIMS and it should go in all the dockets that were noticed in this proceeding.

So anybody who goes into those dockets, or the RM012 docket, would be able to access the information.

MR. WHITMORE: And, Tom Russo, do you think perhaps you could make sure that when you send something out to some of the Commissioners explaining where this is, that we send all of it to everybody?

MR. RUSSO: Yes. We can certainly do that. And I think what we are going to do is, just to be consistent with the November 9th Order on State-Federal Panels, we will probably get this on the website as well so that it will be available to everybody.

Just remember next week we are holding similar regional teleconferences with industry and the public. And on March 25th we are also having the public technical conference on the same issue here at the Commission.

MR. TURNURE: So given that, we should format these up as draft memoranda, basically, so they will be

self-contained documents that can be then shifted around in these various formats?

MR. RUSSO: Correct.

MR. TURNURE: Okay.

MR. MEYERS: Okay, well it is about noon straight up. Does that take care of us?

(No response.)

MR. MEYERS: It's been a great call. It was a very sophisticated, high-level discussion, as we would expect from the Middle Atlantic and Northeast. We thank you very much, and we will be seeing you. Have a good day.

UNIDENTIFIED SPEAKER: Okay, Ed. Take care.

MR. MEYERS: Take care.

(Whereupon, at 12:02 p.m., Friday, March 15, 2002, the telephone conference was adjourned.)